

Public and edit applications

August 2017

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Part A Getting started

The BioNet Vegetation Classification (formerly known as VIS Classification) is the database for plant community types (PCTs) in New South Wales (NSW). The development of the classification database is an integral part of the NSW Vegetation Information System (NSW VIS), which aims to provide a single, integrated source for vegetation information in NSW. Appendix 1 has more background information about the database and how it was developed.

This manual supports the New South Wales Office of Environment and Heritage's (OEH's) BioNet Vegetation Classification public and edit applications.

The manual comprises 4 parts:

- Part A: Getting started
- Part B: Using the BioNet Vegetation Classification public and edit applications
- Part C: Using the additional functions in the Vegetation Classification edit application
- Part D: Appendixes and other information.

It is presented as a step-by-step approach. Additional documentation is provided as links from this document and from the further information links provided in the web application pages.

This manual replaces the VIS Classification (public user manual), the VIS Classification edit user manual (parts 1–3) and the VIS Classification quick guides. It contains instructions for both the public and edit applications. The screenshots in this manual (with the exception of Part C) are taken from the public application, and where the screen differs slightly in the edit app the difference is noted. Therefore, some of the screenshots throughout may not exactly match what you see on your screen, depending on your level of access.

Any queries about this manual can be directed to bionet@environment.nsw.gov.au.

1 BioNet Vegetation Classification: registration and homepage

The public and edit applications access two different, yet similar databases. Thus, many of the instructions for registering and accessing the applications are similar and covered here.

For issues using Internet Explorer, see Appendix 2.

When you have finished your BioNet Vegetation Classification session, please remember to log out of the application by clicking on 'Logout'.

1.1 Registering to use the public application

To register to use the BioNet Vegetation Classification, go to the <u>Public User Login</u> <u>Registration page</u>.

Click on 'New user Register here' to open the new user registration page. A conditions of use page will appear (see Figure 1).

Privacy

Information entered by you as part of the registration process, including any personal details, will be stored in the OEH records system. You can find out more about how OEH handles the personal information it collects online by reading our privacy policy (www.environment.nsw.gov.au/help/privacy.htm). By entering your details, you consent to the collection and use of your personal information in accordance with this policy.	
Copyright	
OEH is the custodian of the BioNet Vegetation Classification database and is responsible for its maintenance, updating and the distribution of data. The data and copyright and other intellectual property rights in the data are and shall remain the property of the copyright holder. Copyright in extracts, printouts or online search results from the VCA database is held by OEH and protected by the copyright laws of Australia. You can save a local copy of search results from this site on your computer or print it for your own personal use. However, when using the site you agree that:	
 if you make a copy of material on the website, you must make sure that the words 'Copyright NSW Office Of Environment and Heritage' are placed in legible text on your copy 	
 if you copy or print material from the site, you cannot charge other people for access to it 	
you cannot modify any material copied from the site without the written permission of OEH.	
Apart from the conditions described above, you cannot publish any material including images (photos, illustrations, banners, logos, buttons and other graphic elements) or text from the site without the written permission of OEH (bionet@environment.nsw.gov.au).	
✓ I have read the above information. I would like to proceed with the user registration. Register Cancel]

Figure 1 Conditions of use page

- 1. Please read the conditions, then click to accept the conditions if you wish to proceed. The 'Register' button will now become active.
- 2. Click to open the registration screen (see Figure 2).



Figure 2 User registration page

Fill in the required details as indicated for each field. Do not use spaces in the phone number field, nor any symbols except underscore in the Password fields.

Once you are registered in the system you will be automatically directed to the homepage.

You will also receive an email (to the email address you provided) noting your registration and with details of your user name and password. Please keep a copy of this email for future reference.

Keep your user name and password secret, as per usual online security recommendations.

To login, go to the login page, and enter your user name and password.

1.1.1 Managing your public registration

Once logged in, you can manage your own user registration details, including changing contact information and your password. Click on 'Manage registration' on the top navigation bar. Click 'Confirm' at the bottom of the screen to save your changes.

If you forget your password, you will need to contact the BioNet support mailbox at <u>bionet@environment.nsw.gov.au</u>.

1.2 Accessing the edit application

If you are an edit user, you will have to request access from the BioNet Vegetation Classification application administrator. Note Edit users are approved Vegetation Classification Project teams, Statutory Data editors and Threatened Biodiversity Accountable Officers who maintain Plant Community Type to Threatened Ecological Community association data. To obtain access to BioNet Vegetation Classification Edit, send a request to <u>bionet@environment.nsw.gov.au</u>, including a statement as to why you require access and attach permission from your manager. External users also need to email access requests to the support mailbox.

Go to the <u>login page</u>. Please enter your network user name (in the format DEC\user name) and password, and click 'Login'.

1.3 Homepage features

1.3.1 News & Bulletins

Click on the 'News & Bulletins' tab on the homepage, next to the 'Home' tab (see Figure 3). News & Bulletins summarises important notifications and alerts in relation to major changes to PCTs or the database itself, including decisions by the PCT Change Control Panel and general information of system changes. Links to further information may be provided (see Figure 4).



Figure 3 News & Bulletins link on the homepage

Home News & E	sulletins		(1.5
News & Bullet	ins		
Date	Comments	Notification type	More information
7/12/2011 8:16:10 AM	Welcome to VIS Classification	General	More Information
7/12/2011 8:16:51 AM	Meeting of The Plant Community Type Change Control Panel	General	More Information
2/04/2012 9:38:40 AM	Outcomes of PCT Panel Meeting	General	More Information
19/09/2012 2:36:35 PM	Please note that due to update of VIS Classification to Version 2.1 the online web application will be unavailable the afternoon of Thursday 20th September 2012. We apologise for any inconvenience this may cause. We expect the VIS Classification to be back online Friday morning 21st September.	General	
17/10/2012 9:25:20 AM	Meeting of the Plant Communit Type Change Control Panel - 3rd October 2012: over 200 new plant community types have been added in the Hunter-Central Rivers CMA region	General	More Information
17/10/2012 9:34:14 AM	New functionality added: i) a new Plant Community Type Identification Tool has been added; and ii) the Quick Search functionability has been enhance to display all data for one plant community type at a time.	General	More Information
15/11/2012 11:43:45 AM	Patch 1 to VIS Classification 2.1	General	More Information
9/05/2013 2:06:10 PM	Updates to PCT data: finalisation of changes from PCT Panel meeting from March 2013.	General	More Information
6/06/2013	Patch 6 to VIS Classification	General	More

Figure 4 News & Bulletins

Periodic updates to data holdings are also published separately as Release notes, available at the <u>BioNet Guides and Manuals webpage</u>.

1.3.2 Timer countdown

The homepage has a time counter at the top right hand corner of the screen. Users are allowed 60 minutes before the system automatically logs off if there has been no page activity. When the counter gets down to less than 1 minute, a warning message will appear. You can reset the timer back to 60 minutes by clicking on anything on a page, moving across pages or clicking the 'Reset' button (see Figure 5).



Figure 5 Timer countdown on the homepage

Part B Using the Vegetation Classification public and edit applications

Users can access data in the BioNet Vegetation Classification in 3 ways (see Figure 6):

- Search and display plant community types (PCTs). 'Search and Display PCT' tab allows access to all data for one PCT at a time. This provides the maximum retrieval of data, but the search must be repeated for each PCT you want information for. Use this for in-depth understanding of one particular PCT. This is called 'Edit' in the edit application.
- Plant Community Identification. The 'Plant Community Identification' tab provides a way to search and retrieve summary information on a range of PCTs by creating and running a series of queries. The results or matches against those criteria are then listed in a tablular format and further refinement of the results can be undertaken by filtering the results table of matching PCTs. This is a more interactive way to identify a range of PCTs and to obtain a quick overview of the main data that defines or describes that PCT (e.g. vegetation structure, species composition). Users can also open individual PCTs to view in more detail.
- **Reports/Exports**. To export data to use in spreadsheets, or to a report format (word and pdf documents) use the 'Reports/Exports' tab. This will guide you through the creation of queries to retrieve the data you need for one or many PCTs, or even retrieve data for all the PCTs in the database. This function is useful if you are after information for a particular vegetation class or within a particular area (e.g. an IBRA Bioregion), and want to be able to view and use the information outside the Vegetation Classification system. 'Reports/Exports' is also the way users can search and retrieve data regarding NSW Landscapes and their % cleared estimates.



Figure 6 'PCT Data' options on the homepage

2 Search and display plant community type (PCT) data

Access this function by clicking on the 'Search and Display PCT' dropdown menu item on the 'PCT Data' top navigation bar.

Not all fields in the BioNet Vegetation Classification applications have been fully populated for all plant communities. Key fully populated fields are displayed in the top half of the search screen under the heading 'State-wide Search Fields'. These fields are suitable for state-wide searches and if used will return a complete list search result for those fields. You should search using these fields if you require a comprehensive list of available PCTs across NSW.

Coverage for the remaining fields in the BioNet Vegetation Classification applications is incomplete, and searches using these fields may retrieve only partial results. Those felds displayed in the bottom half of the Search screen under the heading 'Additional fields' are inconsistently populated and may not produce a comprehensive search result when used (see Section 2.1).

Also see Section 4.1 for information about setting up searches.

2.1 Searching PCT data

The fields for the 'State-wide search' are either text fields (the first 4 fields) or dropdown menu fields (the bottom 6 fields) (see Figure 7).

The additional fields allow you to search by threatened ecological communities (TEC Act and TEC name), and by local government authority (LGA).

Text field boxes Dropdown menu boxes		Plant Community Type ID : VCA ID : Type (part) sc PCT Scientific Name : PCT Common Name :	entific name or click butto	n to sea OR	find species		or V or V or V
		Authority : ation Formation (Keith, 2004) : egetation Class (Keith, 2004) : PCT Definition Status : IBRA Bioregion : IBRA Subregion :	choose choose choose choose choose choose		> > > > > > > > > > > >		or V or V or V or V or V
Additiona Additional F	al fie ields : Local (Ids : (NB: may retrieve only p Government Authority (LGA) : TEC Act : TEC Name :	artial results if include choose choose search clear	d)	✓ ✓ find TEC Name		or V or V or V

State-wide Search Fields:

Figure 7 Search fields using both text fields or dropdown menu items

For the text fields, type in the terms or partial terms and hit 'Enter' on your keyboard, or the 'Search' button at the bottom of the screen. For example, entering 'red gum' in the PCT common name field will retrieve all PCTs with 'red gum' in their common name.

To use one of the dropdown fields, click the dropdown arrow next to the relevant field, then click to select the entry you want (see Figure 8).



Figure 8 Using the text fields and dropdown menu items to search for plant community type

The system will display the results in the area below the search fields at the bottom of the page. It will also tell you how many records match your search term(s) (see Figure 9).

_

Plant community		common name (community)	scientific name (taxon)			
ID						
2	Rive frequ flood	r Red Gum-sedge dominated very tall open forest in ently flooded forest wetland along major rivers and plains in south-western NSW	Eucalyptus camaldulensis subsp. camaldulensis / / Eleocharis acuta , Centipeda cunninghamii , Ranunculus inundatus , Pseudoraphis spinescens	Select		
5	Rive wetla of th east	r Red Gum herbaceous-grassy very tall open forest and on inner floodplains in the lower slopes sub-region e NSW South Western Slopes Bioregion and the ern Riverina Bioregion.	Eucalyptus camaldulensis subsp. camaldulensis / Acacia dealbata / Bothriochloa macra , Carex tereticaulis , Lachnagrostis filiformis , Hemarthria uncinata var. uncinata	Select		
7	Rive oper	r Red Gum - Warrego Grass - herbaceous riparian tall forest wetland mainly in the Riverina Bioregion	Eucalyptus camaldulensis subsp. camaldulensis / Paspalidium jubiflorum , Wahlenbergia fluminalis , Senecio quadridentatus , Carex tereticaulis /	Select		
8	Rive tall v (Rive Biore	r Red Gum - Warrego Grass - Couch Grass riparian voodland wetland of the semi-arid (warm) climate zone rina Bioregion and Murray Darling Depression agion)	Eucalyptus camaldulensis subsp. camaldulensis / Paspalidium jubiflorum , Cynodon dactylon , Wahlenbergia fluminalis , Centipeda cunninghamii /	Select		
9	Rive the o Biore	r Red Gum - wallaby grass tall woodland wetland on puter River Red Gum zone mainly in the Riverina agion	Eucalyptus camaldulensis subsp. camaldulensis / / Austrodanthonia caespitosa , Juncus flavidus , Carex inversa			
10	Rive arid Murr	r Red Gum - Black Box woodland wetland of the semi- (warm) climatic zone (mainly Riverina Bioregion and ay Darling Depression Bioregion)	Eucalyptus camaldulensis subsp. camaldulensis , Eucalyptus largiflorens / Muehlenbeckia florulenta / Cyperus exaltatus , Paspalidium jubiflorum , Oxalis perennans			
11	Rive wetla (mai Biore	r Red Gum - Lignum very tall open forest or woodland and on floodplains of semi-arid (warm) climate zone nly Riverina Bioregion and Murray Darling Depression agion)	Eucalyptus camaldulensis subsp. camaldulensis / Acacia stenophylla , Muehlenbeckia florulenta / Paspalidium jubiflorum , Cyperus gymnocaulos , Einadia nutans subsp. nutans	Select		
36	Rive wetla Rive	r Red Gum tall to very tall open forest / woodland and on rivers on floodplains mainly in the Darling rine Plains Bioregion	Eucalyptus camaldulensis subsp. camaldulensis / Acacia stenophylla , Acacia salicina , Muehlenbeckia florulenta / Paspalidium jubiflorum , Eleocharis plana , Rumex brownii , Einadia nutans subsp. nutans	Select		
41	Rive wate	r Red Gum open woodland wetland of intermittent rcourses mainly of the arid climate zone	Eucalyptus camaldulensis, Eucalyptus coolabah subsp. coolabah, Eucalyptus coolabah subsp. arida, Eucalyptus largiflorens / Acacia salicina, Myoporum montanum, Rhagodia spinescens, Acacia stenophylla / Enchrylaena tomentosa, Tetragonia eremaea, Enneapogon avenaceus, Dactyloctenium radulans	Select		
42	Rive the H	r Red Gum / River Oak riparian woodland wetland in Junter Valley	Eucalyptus camaldulensis / Austrostipa verticillata / Austrodanthonia spp. , Cynodon dactylon , Einadia trigonos , Enchylaena tomentosa	Select		
1234	5 (578910				

Figure 9 Search results screenshot

If you want to create a search using more than one term, either type in the full or partial terms in the free text fields, and select the relevant entries via the dropdown fields. When you have completed entering your terms, hit 'Enter' on your keyboard, or the 'Search' button at the bottom of the screen and the system will display the results in the area below the search fields at the bottom of the page as shown previously.

You can modify the terms to refine your search at any time. To clear all the terms in the fields and the list of matched results, click the 'Clear' button at the bottom of the page.

When you are using multiple fields to create your search, you can specify how you want the terms to interact. This means setting a condition where ALL terms must be met, or where ANY of the terms are met. These two types of interactions are chosen via the dropdown fields to the right of the relevant field.

As an example, selecting Alpine Herbfields from the Vegetation Class (Keith 2004) field, then selecting Broken Hill Complex from the IBRA Bioregion field and leaving the interaction term as the default 'or' – as shown in Figure 10 – will retrieve a list of all PCTs that are either in the Broken Hill Complex IBRA Bioregion or are defined as within the Alpine Herbfields Vegetation Class.



Figure 10 Using 'or' when entering search fields

However, altering the interaction term for the second criteria (i.e. the Vegetation Class) to 'and' (see Figure 11) – will alter the search so that the system will retrieve PCTs that are both in the Broken Hill Complex IBRA Bioregion AND in the Alpine Herbfields Vegetation Class.

In this instance, no results will be retrieved, as (unsurprisingly) there are no Alpine Herbfields in the Broken Hill Complex IBRA Bioregion. The fact that no matches were found will be indicated at the bottom of the (now empty) Search results section.

State-wide Search Fields:		
Plant Community Type ID :		
VCA ID :	or 🔽	i
Type (part) sc	ientific name or click button to search for name	
PCT Scientific Name :	OR find species or 🗸	1
PCT Common Name :	or 🔽	i
Authority :	choose V	
Vegetation Formation (Keith, 2004) :	choose	i i
Vegetation Class (Keith, 2004) :	114 Alpine Herbfields 🗸	i –
PCT Definition Status :	choose V	
IBRA Bioregion :	BHC Broken Hill Complex 🗸	i
IBRA Subregion :	choose 🗸 🗸	j
Additional Fields : (NB: may retrieve only p	partial results if included)	
Local Government Authority (LGA) :	choose v or v	1
TEC Act :	choose v	1
TEC Name :	find TEC Name or 🗸	1
	search clear	-
Search results		
No communities meet your search criteria		

Figure 11 Using 'and' when entering search fields

2.2 Displaying and viewing PCT data

When you want to view the data for the (or one of the) PCTs listed in the Search results, click the 'View' button to the right of the relevant PCT name (see Figure 12).`



Figure 12 Viewing PCT data

This will retrieve for display all of the data held for that PCT. There are more than 200 fields to be retrieved and displayed so it may take some time for the system to finish the retrieval. When the data are retrieved, the BioNet Vegetation Classification tabbed display will appear with the data for that PCT in the relevant fields.

The data are organised into eight broad topic areas as indicated by the titled tabs – by default the screen will appear with the 'Vegetation community details' tab active/open. For each tab, data are further organised in sections within that tab, as indicated by the blue bars with white text that describes that section – by default, the Community Name and Classification level section opens first (see Figure 13).



Figure 13 PCT tabbed display showing the 'Community Name and Classification Level' section

The section header bars operate as accordions (i.e. click to open one while automatically closing the currently open one). So clicking on the 'Vegetation Formation & Class' section heading will open the 'Vegetation Formation & Class' section while automatically closing the 'Community Name and Classification Level' section (see Figure 14).

Vegetation community details	Scientific description	Distribution information	Extent	Threatened Biodiversity, TECs & Benchmarks	Spatial information	Image management	Status and lineage	2
Community Name ar	nd Classificat	tion Level						
Vegetation Formatio	n & Class							
Vegetatio (Neith 2004) :	KF_CH1 Ra	inforests	4.2			\checkmark	Diagnostic key for Formations
Vegetation Class (Keith 2004) :	Subtropical	Rainfores	ts			\sim	Table of Classes and Formations

Figure 14 Tabs under the 'Vegetation community details' dropdown menu item

To navigate through the information, click on one of the eight major tabs to open a major data group area, then use the section headings to open and close the relevant information.

In a number of places, links provide further information on various aspects of the data displayed (in the EDIT application, these links assist with data entry). For example (see Figure 15), in the 'Community Structure' section within the 'Scientific description' tab, the three text links open three different pdf documents providing details on the community structure information provided.

Classification Type :						- 1-51			
PCT % Cleared Statu	IS: Approved IS: Draft P	PC I CT Threatene	d Ecologia	cal Communities Association	Status : 0	naetinea 2/2013		Tool	Ready : No
Classification confid	ience level : 2	2 High		Autho	rity : VCA 1.1	- archive			
Vegetation community details	Scientific description	Distribution	Extent	Threatened Biodiversity, TECs & Benchmarks	Spatial information	Image management	Status and lineage		
Species by Stratum									
Species by Growth	Form								
Community Structure									
Community Structure Guide Walker & Hopkins Height Guide Cover Type Codes									
U1 U2 U3 I	M1 M2 M	43 G1 G	2						
U1: Upper Sul	b-stratum			Sub-stratum rank:	1 🗸]		Dominant stratum	: 🗹

Figure 15 'Community Structure' section within the 'Scientific description' tab

A 'Print PCT' button has been included in the header section, to print key PCT information. It prints the same information available in the community profile report as a pdf document (see Figure 16).



Figure 16 The 'Print PCT' button

3 Plant Community Identification

The Plant Community Identification tool allows you to build a set of search criteria and then display the results that match your criteria. You can also modify the criteria and view summary information on selected communities (see Sections 3.1 to 3.4). You can export your matched results as .csv or .doc files (see Section 3.5), or click on links to open individual PCTs in separate windows.

Click on 'Plant Community Identification' in the dropdown menu under the 'PCT Data' top navigation bar.

This will open the main Plant Community Identification page (see Figure 17).

All searches will be added to the 'Selected search criteria' box (shown to the right of the search criteria, as in Figure 17). Note, all searches use the 'or' option (i.e. results may meet as few as one search criterion).

HOME	PCT DATA	MANAGE REGI	STRATION	HELP	LOGOUT		LOGGED IN AS : VCAPUBLIC (READ ONLY USER)
Comr	nunity Ide	entification					Guide to community identification
Dichotom	ous Formatio	on Key 😲					
····· Vegetat	ion Formation K	еу					
Search cri	iteria 🤨			Sele	ected searc	criteria 🕐	
- Vegetat	ion Formation (K	(eith 2004)	~				
- Vegetat	ion Class (Keith	2004)					
- IBRA R	egion						
Commu	nity Species (All	strata)					
Commu	nity Species (Up	oper stratum)					
- Commu	nity Species (Mi	d stratum)					
- Commu	nity Species (Gr	ound stratum)					
- Commu	nity Structure						
🛓 - Commu	nity Height/Cove	er Metrics					
Commu (Walker	nity Height Clas &Hopkins)	ses	~				
			Show Res	ults		View Summarie	is 🕐

Figure 17 Main 'Plant Communication Identification' tool page

Note that background information is available for the various sections via the '?' icons; just click the relevant icon to get a pop-up screen for that section (see Figure 18).

Click anywhere (other than another '?' icon) to make the pop-up go away.

 arch criterie Vegetation Format Vegetation Class IBRA Region Community Specie Community Species (Ground stratum) Community Height/Cover Metrics 	
Community Structure } Community Height/Cover Metrics	e
Community Height/Cover Metrics	
Community Height Classes (Walker&Hopkins)	~

Figure 18 Background information '?' icon

3.1 Dichotomous Formation Key

The Dichotomous Formation Key is an optional way to select vegetation formations and classes (Keith, 2004). Both formation and class may also be selected directly via the search criteria (see Section 3.2.1, Vegetation Formation and Class). The Dichotomous Formation Key provides a way to determine the Formation and/or Class using diagnostic information.

The key is a series of questions arranged in couplets, each with two alternative answers (e.g. 'A' and 'A*'). To use the key, read both alternative answers, choose the answer that most accurately defines the vegetation formation then go to the next couple of questions and contine clicking on the most accurate answer until you reach a formation name (italics). Note that for some formations there is more than one possible path to arrive at the formation (after Keith, 2004).

1. To open the Dichotomous Formation Key, click on 'Vegetation Formation Key' (see Figure 19).

Community Identification				Guide to community identification
Dichotomous Formation Key 🕐				
Search criteria 😲		Selected search criteria	•	
Vegetation Formation (Keith 2004) Vegetation Class (Keith 2004) IBRA Region Community Species (All strata) Community Species (Upper stratum) Community Species (Mid stratum) Community Species (Ground stratum) Community Height/Cover Metrics Community Height/Classes (Walker&Hopkins)	~			
	Show Results	٩	View Summaries	

Figure 19 Vegetation Formation Key

2. This will open the first level of the key. To open the next levels in the key, click on the '+' sign to the left of the relevant option (see Figure 20).

	Close
Dichotomous Formation Key	
A. Vegetation dominated by trees (single-stemmed woody plants, or multi-stemmed mallee eucalypts that are generally more than 5 mature).	n tall when
B. B*. Forests or woodlands not dominated by eucalypts, although these may be present as scattered individuals.	
A : nees absent, of present only as scattered emergencindividuals.	
	`

Figure 20 Different levels of the Vegetation Formation Key

- 3. To close a level, click on the '-' sign next to the relevant level. You can open each level independent of other levels (i.e. unless you close a level, it will remain open).
- 4. Keep choosing the appropriate path until you reach the Formation description; this will be marked by a capital 'F' icon . Click once to highlight the desired Formation (it might take a second or two for the selection to be highlighted) (see Figure 21).

	Close
Dichotomous Formation Key	
A. Vegetation dominated by trees (single-stemmed woody plants, or multi-stemmed mallee eucalypts that are generally more than 5 m tall mature).	when
B. Forests or woodlands dominated by eucalypts.	
C. Tall forests (typically >30 m) dominated by tall straight-trunked eucalypts, usually with soft-leaved shrubs, ferns or herbs in the understorey. Largely confined to moderately fertile soils in sheltered locations on the coast and escarpment where average annua exceeds 900 mm. Excludes riverine forests west of the Great Divide that lack the understorey characteristics described above.	al rainfall
C*. Forests or woodlands dominated by short to moderately tall trees (rarely >35 m), usually branching at less than half of their hei - understorey generally lacks ferns and shrubs with broad soft leaves, but may include abundant grasses, hard-leaved shrubs or ep herbs. Widespread east and west of the Great Divide.	ight. The phemeral
D. Forests or woodlands with an abundance of plant groups in the understorey that are able to tolerate periodic inundation or waterlogging, particularly sedges, rushes and reeds. Confined to damp, low-lying parts of the coast, or adjacent to rivers, lake swamps in the inland.	s or
I I I I I I I I I I I I I I I I I I I	
. D*. Forests or woodlands generally lacking plants that tolerate inundation or waterlogging. Rarely in damp, low lying sites adja rivers, lakes or swamps.	acent to
B*. Forests or woodlands not dominated by eucalypts, although these may be present as scattered individuals.	
⊞- A*. Trees absent, or present only as scattered emergent individuals.	
ОК	

Figure 21 Highlighted selection of the Dichotomous Formation Key

5. You can also select a Vegetation Class by opening the Formation list (click once on the '+' sign) which will open the Vegetation Classes for that Formation; the Classes are denoted by the capital 'C' icon. Click once to select the desired Vegetation Class and then click 'OK' (see Figure 22).

	Close
Dichotomous Formation Key	
A. Vegetation dominated by trees (single-stemmed woody plants, or multi-stemmed mallee eucalypts that are generally more than 5 m t mature).	all when
B. Forests or woodlands dominated by eucalypts.	
C. Tall forests (typically >30 m) dominated by tall straight-trunked eucalypts, usually with soft-leaved shrubs, ferns or herbs in th wunderstorey. Largely confined to moderately fertile soils in sheltered locations on the coast and escarpment where average and exceeds 900 mm. Excludes riverine forests west of the Great Divide that lack the understorey characteristics described above.	e iual rainfall
C*. Forests or woodlands dominated by short to moderately tall trees (rarely >35 m), usually branching at less than half of their - understorey generally lacks ferns and shrubs with broad soft leaves, but may include abundant grasses, hard-leaved shrubs of herbs. Widespread east and west of the Great Divide.	height. The r ephemeral
D. Forests or woodlands with an abundance of plant groups in the understorey that are able to tolerate periodic inundation waterlogging, particularly sedges, rushes and reeds. Confined to damp, low-lying parts of the coast, or adjacent to rivers, la swamps in the inland.	or akes or
🖨 🕜 Forested wetlands (Ch 9)	
🖥 🛈 Forested Wetlands	
👔 👔 👔 📴 🔁 Eastern Riverine Forest <mark>s</mark>	
🕲 Inland Riverine Forests	
🔘 Coastal Floodplain Wetlands	
📖 🔘 Coastal Swamp Forests	
D*. Forests or woodlands generally lacking plants that tolerate inundation or waterlogging. Rarely in damp, low lying sites a rivers, lakes or swamps.	adjacent to
🐵 B*. Forests or woodlands not dominated by eucalypts, although these may be present as scattered individuals.	
🗄 - A*. Trees absent, or present only as scattered emergent individuals.	
ОК	

Figure 22 Vegetation Class of the Dichotomous Formation Key

6. The selected Vegetation Formation (or Class) will be added to the 'Selected search criteria' box. To change or remove the selected criteria, click the 'Edit Criteria' or 'Delete criteria' links on the right of the relevant criterion.

Community Identification	ı				Guide to community identification
Dichotomous Formation Key 😲					
Vegetation Formation Key					
Search criteria 😲		Selected searc	h criteria 😲		
Vegetation Formation (Keith 2004)	~	Criteria	Value		
Vegetation Class (Keith 2004)		Vegetation	= Eastern Riverine	Edit criteria	Delete criteria
IBRA Region		Class	Forests		
Community Species (All strata)					
Community Species (Upper stratum)					
Community Species (Mid stratum)					
- Community Species (Ground stratum)					
- Community Structure					
Community Height/Cover Metrics					
Community Height Classes (Walker&Hopkins)	~				
	Show Results			View Summaries	

Figure 23 Options to edit or delete criteria once in the 'Selected search criteria' box

3.2 Plant Community Identification tool search criteria

The main area of the PCT ID tool page is used to construct your search to identify and present summary information for individual PCTs. Summary information for the relevant Vegetation Class and Formation can also be viewed as a result of your search.

3.2.1 IBRA Regions

To select an Interim Biogeographic Regionalisation for Australia (IBRA Region) (see Figure 24):

- 1. Click 'IBRA Region' to bring up the list.
- 2. Click once to highlight the relevant IBRA Region.
- 3. Click 'OK' to enter the selected IBRA Region into the Search Criteria.



Figure 24 Selecting an IBRA Region

3.2.2 Vegetation Formation and Class

In addition to using the Dichotomous Formation Key, Vegetation Formation and Class can also be selected:

1. Click the 'Vegetation Formation (Keith 2004)' menu option (see Figure 25). The list of Formations will appear (see Figure 26).

Community Identification							Guide to community identification
Dichotomous Formation Key 😲							
Vegetation Formation Key							
Search criteria 😲		s	elected search	ı cri	teria 😲		
Vegetation Formation (Keith 2004)			Criteria		Value		
Vegetation Class (Keith 2004)			Vegetation	=	Eastern Riverine	Edit criteria	Delete criteria
IBRA Region			Class		Forests		
Community Species (All strata)							
Community Species (Upper stratum)							
Community Species (Mid stratum)							
Community Species (Ground stratum)							
Community Structure							
Community Height/Cover Metrics							
Community Height Classes (Walker&Hopkins)	~						
	Show F	Results	?		١	/iew Summaries	

Figure 25 Vegetation Formation (Keith 2004) menu

	Close
Community Vegetation Formation (Keith 2004)	
Alpine Complex	
- Arid Shrublands (Acacia sub-formation)	
Arid Shrublands (Chenopod sub-formation)	
Dry Sclerophyll Forests (Shrub/grass sub-formation)	
Dry Sclerophyll Forests (Shrubby sub-formation)	
Forested Wetlands	
Freshwater Wetlands	
Grasslands	
Grassy Woodlands	
Heathlands	
Rainforests	
Saline Wetlands	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Somi arid Moodlande (Gracev sub formation)	_
	ж

Figure 26 List of formations under the Vegetation Formation (Keith 2004) menu

- 2. Click once to highlight the relevant Formation, then click OK to add it to the criteria (if you select the same Formation again, it will be added twice).
- 3. To select a Vegetation Class, click the Vegetation Class (Keith 2004) menu option. The Vegetation Classes will be grouped within their relevant Formations (see Figure 27).

	Close
Community Vegetation Class (Keith 2004)	
I Alpine Complex	^
Arid Shrublands (Acacia sub-formation)	
Arid Shrublands (Chenopod sub-formation)	
👜 🕢 Dry Sclerophyll Forests (Shrub/grass sub-formation)	
👜 🕢 Dry Sclerophyll Forests (Shrubby sub-formation)	
🖨 🛈 Forested Wetlands	
🛞 Coastal Floodplain Wetlands	
🛞 Coastal Swamp Forests	
💿 <mark>Eastern Riverine Forests</mark>	
Inland Riverine Forests	
🛱 🕜 Freshwater Wetlands	
🖶 🕢 Grasslands	
E Crossy Woodlands	~
	ОК

Figure 27 Vegetation Formation and Vegetation Class search criteria

- 4. Click on the '+' sign next to the appropriate Formation to open the list of relevant Classes.
- 5. Click once to highlight the relevant Vegetation Class (see Figure 28).
- 6. Click 'OK'. The selected information will be entered into the 'Selected search criteria' box on the top right.
- 7. You can also click 'Close link' if you change your mind and decide not to select a Class.

Community Identification							Guide to community identifica
Dichotomous Formation Key 🕐							
Search criteria 🤨		Select	ted search cri	iteria	a 😲		
Vegetation Formation (Keith 2004)			Criteria		Value		
Vegetation Class (Keith 2004)			Vegetation	=	Eastern	Edit criteria	Delete criteria
IBRA Region			Class		Riverine Forests		
Community Species (All strata)		Any	Vegetation	-	Forested	Edit criteria	Delete criteria
Community Species (Upper stratum)		(Or)	Formation	-	Wetlands	Editentia	Delete unterta
Community Species (Mid stratum)							
- Community Species (Ground stratum)							
- Community Structure							
Community Height/Cover Metrics							
Community Height Classes (Walker&Hopkins)	~						
	Show Results	?				View Summaries	

Figure 28 Selecting Vegetation Classes under Vegetation Formations (Keith 2004)

8. To change or remove the selected criteria, click the 'Edit criteria' or 'Delete criteria' links on the right of the relevant criterion (see Figure 27).

3.2.3 Community species: all strata; or upper, middle or ground stratum

You can select PCTs by the scientific or common names of species recorded in the community. The method to select Community Species is the same for the All strata, Upper, Middle and Ground Strata. Using the All strata option searches for a species – that is, listed

in any of the species lists (i.e. Upper, Middle or Ground). If you want to select a species from within only one stratum, then use the relevant option (see Figure 29).

Community Identification							Guide to community identification
Dichotomous Formation Key 😲							
···· Vegetation Formation Key							
Search criteria 😲		Select	ed search cr	iteri	a 😲		
····· Vegetation Formation (Keith 2004)	•		Criteria		Value		
Vegetation Class (Keith 2004)			Vegetation	=	Eastern	Edit criteria	Delete criteria
IBRA Region	_		Class		Riverine Forests		
Community Species (All strata)		Any		_	Channel	Editoria	Doloto critoria
Community Species (Upper stratum)		(Or)	Bioregion	-	Country (CHC)	Edit Chteria	Delete chieria
Community Species (Mid stratum)							
Community Species (Ground stratum)							
Community Structure							
E- Community Height/Cover Metrics							
Community Height Classes (Walker&Hopkins)	~						
	Show Results	٩			Vi	ew Summaries 🛛 😲	

Figure 29 Selecting species from Community Stratum

Only the Upper Stratum is detailed here, as an example. For selection of species:

- 1. Click the Community Species (Upper Stratum) menu option. This will open the species selection screen (see Figure 30).
- 2. To search for a species, you can use only the scientific name, or include the common name in the search check or uncheck the 'Add common name to search' button as required. The field will autosearch based on any three or more letters entered into the 'Type in a species name' field once there is a pause of two seconds in typing, and will retrieve matches for species names commencing with these letters. So typing 'euc' will retrieve all species with Genus name beginning with 'euc' (see Figure 30). To use the species suffix to search on rather than select from a list based on genus, you can either type the full genus name and at least three letters of the species name, or type three (or more letters) of the genus name, then '+' and three or more letters of the species name (e.g. 'euc+cam'). The '+' option must be closed up text (i.e. 'euc + cam' with spaces will not retrieve search results) (see Figure 31).







Figure 31 Searching for community species using '+'

- 3. When the relevant species name appears, click once to select the name.
- 4. Click 'OK' to make it a search criterion. The selected name will appear in the 'Selected search criteria' box at the top right.
- 5. If you want to view details on the species once it is entered into the species name field, click the 'View Species details' button. This will link directly to the PlantNet database (Royal Botanic Gardens and Domain Trust) in a separate browser window and retrieve the information on the species.
- 6. When you have finished, close the window to return to the species selection page.

3.2.4 Community Structure

To search by Community Structure (e.g. 'Woodland', 'Open Woodland') (see Figure 32):

- Click the 'Community Structure' option from the criteria list. This will open the list of available Community Structure terms. Each of these terms contains the list of relevant community structures as defined in Walker and Hopkins (1990) for that growth form group (N.B. Woodland contains 'forest' as well as 'woodland' types).
- 2. Click on the '+' sign next to the relevant group to open the community structure terms within that group.
- 3. Click once to highlight the relevant term.
- 4. Click 'OK' to add the term to the search criteria. The selected term will appear in the 'Selected search criteria' box at the top right.



Figure 32 Searching by Community Structure

3.2.5 Community Height (Mean)/ Cover (Mean) Metrics

You can search for PCTs by specifying actual measures of structure in terms of height and cover for the community (see Figure 33):

- 1. Click on the '+' sign next to the 'Community Height/Cover Metrics' option in the Search Criteria list to open the two available paths.
- 2. Click on 'Community Height' to open the relevant dialogue box.
- 3. Select the appropriate operator for the mean height you are interested in. Note it is only possible to search on one end of a range as searching on both will select all. If a range is wanted, then use 'Community Height Classes', which are separated into growth forms.

	Gillena		Value		
	Height Mean	>	1	Edit criteria	Delete criteria
ny (Or)	Height Mean	<	3	Edit criteria	Delete criteria

Selected search criteria 😲

Figure 33 Searching for PCTs using specific metrics

- 4. Enter the actual figure (integer) to represent the mean height in metres.
- 5. Click 'OK' as shown below (Figure 34 defines mean height equal to 5 metres). The selected term will appear in the 'Selected search criteria' box at the top right.

HOME	PCT DATA	ADMINISTRATION	HELP LOGOUT			LOGGED IN A		
				>= <=				Close
Comr	nunity Ide	ntification	Community mean h	é m)				
Dichotom	ous Formatio	n Key 😲	Mean value	;	1			
	ion Formation Ke	y					ОК	
Search cri	iteria 😲							-
- IBRA R								
	nity Species (All	strata)						
	nity Species (Up	per stratum)						
	nity Species (Mic	l stratum)						
	nity Species (Gro							
	nity Structure							
🖕 Commu	nity Height/Cove	r Metrics						
- Cor	mmunity Height		•					
- Cor	mmunity Cover							
	nity Height Class &Hopkins)	es 🗸						
		Sha						

Figure 34 Searching for PCTs with a height equal to 5 metres

- 6. Click on 'Community Cover' to open the relevant dialogue box. Select the appropriate operator for the mean cover value you are interested in. The operators are the same as those for 'Community Height'.
- 7. Note it is only possible to search on one end of a range as searching on both will select all. If a range is wanted, then use 'Community Cover Classes'. Enter the actual figure (integer) to represent the cover percentage (Figure 35 defines mean cover based on Crown or Canopy Cover type equal to or greater than 15%).
- 8. Select the Cover Type you want to use, and then click 'OK'. The selected term will appear in the 'Selected search criteria' box.

Community Identification		Close
Dichotomous Formation Key 🕐	Commu <u>nity mean cover (%)</u> Operator >= ✓ Mean value 15	
Search criteria 😗	Cover Type IN : Crown or Canopy Cover 🗹 Cover Type Codes	
IBRA Region	ОК	
Community Species (All strata)		
···· Community Species (Upper stratum)		
···· Community Species (Mid stratum)		
···· Community Species (Ground stratum)		
Community Structure		
Generative Sector Cover Metrics		
Community Cover		
Community Height Classes (Walker&Hopkins)		
Show Result	5	

Figure 35 Searching for PCTs with mean Crown or Canopy Cover greater than or equal to 15%

Further information on cover types is provided in Walker and Hopkins (1990), specifically pp 66–77.

3.2.6 Community Height Classes

To search by Community Height Classes (see Figure 36):

- 1. Click on 'Community Height Classes' in the Search Criteria list to bring up the list of Height Classes. Each of these terms contains the list of relevant community height classes as defined in Walker and Hopkins (1990) for that growth form group.
- 2. Click on the '+' sign next to the relevant group to open the community height classes within that group.
- 3. Click once to highlight the relevant term.
- 4. Click 'OK' to add the term to the search criteria. The selected term will appear in the 'Selectd search criteria' box at the top right.





3.2.7 Community Cover Classes

To search by Community Cover Class (see Figure 37):

- 1. Click on 'Community Cover Classes' in the Search Criteria list to bring up the list of Cover Classes.
- 2. Click on the relevant Cover Class.
- 3. Click 'OK' to add the term to the search criteria. The selected term will appear in the 'Selected search criteria' box.



Figure 37 Searching by Community Cover Class

3.2.8 Community Growth Forms

You can search for PCTs by specifying the growth forms within the community overall (see Figure 38):

- 1. Click on the '+' sign next to the 'Community Growth Forms (Walker and Hopkins)' option in the Search criteria list to open the two available paths as shown below (N.B. you may need to scroll down the list to view these).
- 2. Click on 'Growth Forms (Walker and Hopkins)' to bring up the list of growth forms.
- 3. Open the subsections of growth forms by clicking the '+' sign next to the appropriate term, then click once to highlight the desired growth form.
- 4. Click 'OK' to add the growth form to the search criteria. The selected term will appear in the 'Selected search criteria' box.

Community Identification		Close
Dichotomous Formation Key 🔇	Community growth forms (Walker and Hopkins) ees group [Trees, vines, palms] - treeferm (P)	
Search criteria Community Species (Ground stratum) Community Structure Community Height/Cover Metrics Community Height/Cover Metrics Community Cover Community Cover Community Cover Classes Community Growth forms (Walker&Hopkins)	vine / twiner (L) palm (P)	
Growth forms by Stratum (Walker&Hopkins)	ОК	
Show	Resu	

Figure 38 Searching by Community Growth Forms overall

You can search for PCTs by specifying the growth forms within specific strata (see Figure 39):

- 1. Click on 'Growth Forms by Stratum (Walker & Hopkins)'. The Stratum selection screen will appear.
- 2. Open the sublists by clicking the '+' sign until you reach the list of available growth forms (black font).
- 3. Click once on the relevant growth form.
- 4. Click 'OK'. The selected term will appear in the 'Selected search criteria' box at the top right.



Figure 39 Searching by Community Growth Forms within specific strata

3.3 Plant Community Identification – showing results

While you are building your search criteria, you can display the PCTs currently matching your selected criteria. To do this:

1. Click the 'Show Results' button and the results will be displayed in the results section at the bottom of the page. The results area presents the matching list within a hierarchy of Vegetation Formation, Vegetation Class and PCT, as denoted by the column names.

 To group the results alphabetically by one of these, drag the column name into the area above marked 'Drag a column header and drop it here to group by that column' (Figure 40).

Communi	y Species (Ground s	stratum)			Critoria		laluo			
- Communit	ty Structure	,	^		Cillena		value			
G- Communit	ty Height/Cover Metr	ics			Upper Stratum Species	Contains t	olue gum	Edit criteria	Delete	e criteria
- Comr	nunity Height			Any	Upper	Contains E	Eucalyptus	Edit criteria	Delete	e criteria
Communit (Walker&F	y Height Classes			(Or)	Stratum Species	c	amaldulensis			
- Communit	ty Cover Classes			Any (Or)	PCT Community	= (Open Forest	Edit criteria	Delete	e criteria
🖕 Communit	ty Growth forms (Wa	lker&Hopkins)			Structure					
- Grow	th forms (Walker&He	opkins)								
Grow (Walk	th forms by Stratum er&Hopkins)		~							
29 records fou	ind.	5	Show Results	্			View	/ Summaries 🕐		
29 records fou Drag a column	ind. header and drop it	here to group of	Show Results	3			View	/ Summaries 🕐		
29 records fou Drag a column	ind. header and drop it	here to group o	Show Results		>		View	v Summaries 👔	Export to CSV	Export to V
29 records fou Drag a column	nd. header and drop it Select to View	here to group o	Show Results Formation Formation		Class	Vegetatio	 n_Type No_of_m	v Summaries 🛛 🐼	Export to CSV SpeciesUpper1	Export to V Structure
29 records fou Drag a column	Ind. header and drop it Select to View	here to group o	Formation Formation		Class	Vegetatio	n_Type No_of_m	A Summaries (2)	Export to CSV SpeciesUpper1	Export to V Structure
29 records fou Drag a column	Ind. I header and drop it Select to View	here to group of	Formation Formation	etlan	Class	Vegetatio	n_Type No_of_m	V Summaries (2)	Export to CSV SpeciesUpper1	Export to V Structure
29 records fou Drag a column Open PCT Open PCT	Ind. header and drop it Select to View	PCT_ID PCT_ID 2 5	Formation Formation Forested We Forested We	etlan: I	Class Inland Riverine I	Vegetatio	Gum-s 2 Gum h 2	v Summaries 🔅	Export to CSV SpeciesUpper1	Export to V Structure
29 records fou Drag a column Open PCT Open PCT Open PCT	Ind. header and drop it Select to View	PCT_ID PCT_ID 2 5 7	Formation Formation Forested We Forested We Forested We	etlanı 1 etlanı 1	Class Inland Riverine I Inland Riverine I Inland Riverine I	Vegetatio	No_of_m Gum-s 2 Gum h 2 Gum - 2	A Summaries (2)	Export to CSV SpeciesUpper1	Export to V Structure
29 records fou Drag a column Open PCT Open PCT Open PCT Open PCT	Ind. header and drop it Select to View	PCT_ID PCT_ID T 2 5 7 11	Formation Formation Forested We Forested We	etlan:] etlan:] etlan:]	Class Inland Riverine I Inland Riverine I Inland Riverine I Inland Riverine I	Vegetatio	No_of_m Gum-s 2 Gum + 2 Gum - 2 Gum - 2	A Summaries (2)	Export to CSV SpeciesUpper1 T 1 1 1 1 1	Export to V Structure

Figure 40 Displaying PCT search results by Formation

3. To remove the grouping, click the 'x' on the column name in the sort area. The list will revert to the non-sorted list (see Figure 41).

			Show	Results 😲			View Summa	aries 🥐			_
729 Fo	records found										
	Click	here to ungroup						X	Export to CSV	Export to Wo	ord
		Select to View	PCT_ID	Formation	Class	Vegetation_Type	No_of_matches	Species Upper	SpeciesUpper1	Structure	
			T				T	T	T	T]
~	Formation: A	rid Shrublands (Acacia sub-form	ation)							
	Open PCT		118	Arid Shrublands	Gibber Transition	Gidgee chenopc	1	0	0	1	
~	Formation: D	ry Sclerophyll Fo	orests (Shrub/gra	ass sub-formatio	n)						
	Open PCT		88	Dry Sclerophyll F	Pilliga Outwash I	Pilliga Box - Whi	1	0	0	1	
	Open PCT		288	Dry Sclerophyll F	Upper Riverina [Long-leaved Bo>	1	0	0	1	~

Figure 41 Removing the grouping to revert to a non-sorted results list

4. For each PCT displayed, the total number of criteria matched is shown in the column labelled 'No_of_matches'. Each of the search criteria used is listed in a separate column with 0 or 1 in the row for each PCT listed to indicate if the PCT is matched (1) or not (0) on that criteria. When the list of PCTs are displayed, the PCT ID is included in the search results (see Figure 42).

291 records found	1.							
Drag a column h	eader and drop it here to	group by that colur	nn					
		\frown	<			Export to C	SV Export to	o Word
	Select to View	PCT_ID	Formation	Class	Vegetation_Type	No_of_matches	IBRA	
		T						
Open PCT		27	Semi-arid Woodlands	Riverine Plain Woodla	Weeping Myall open	1 Filter	1	~
Open PCT		35	Semi-arid Woodlands	Brigalow Clay Plain W	Brigalow - Belah oper	1	1	
Open PCT		36	Forested Wetlands	Inland Riverine Forest	River Red Gum tall to	1	1	
Open PCT		37	Semi-arid Woodlands	North-west Floodplai	Black Box woodland v	1	1	
Open PCT		40	Semi-arid Woodlands	North-west Floodplai	Coolabah open wood	1	1	~
								-

Figure 42 Displaying the PCT_ID in the search results

5. On this screen, an 'Open PCT' link has been created to the 'PCT Display' screen (see Figure 43). This allows users to open the selected PCT directly from the results area, bypassing the need to go through 'Search and Display PCT'. The selected PCT will open in a new window and can be closed at any time.

						Export to (CSV 🗾 Export to	o Word
	Select to View	PCT_ID	Formation	Class	Vegetation_Type	No_of_matches	IBRA	
	1	T				T	T	
Open PCT		27	Semi-arid Woodlands	Riverine Plain Woodla	Weeping Myall open	1	1	~
Open PCT		35	Semi-arid Woodlands	Brigalow Clay Plain W	Brigalow - Belah oper	1	1	
Open PCT		36	Forested Wetlands	Inland Riverine Forest	River Red Gum tall to	1	1	
Open PCT		37	Semi-arid Woodlands	North-west Floodplai	Black Box woodland v	1	1	
Open PCT		40	Semi-arid Woodlands	North-west Floodplai	Coolabah open wood	1	1	~

Figure 43 Opening the PCT link through the search results

3.3.1 Sorting results

By default, the results are initially displayed in order of the total number of matches (i.e. numbers in the 'No_of_matches' column) in descending order (highest at top). To sort the results list in ascending or descending order for any column:

1. Click on the relevant column header ('Keith Class' is used as the example in Figure 44).

ormation 🔺 🗵										
								Exp	oort to CSV	Export to W
	Select to View	PCT_ID	Formation	Class	Vegetation_Ty	No_of_matche	IBRA	Species Grd	Structure	Keith_class
		T				T	T	T	T	T
Open PCT		302	Dry Sclerophyl	Upper Riverina	Riparian Blakel	1	0	0	1	0
Open PCT		304	Dry Sclerophyl	Upper Riverina	Candlebark - A	1	0	0	1	0
Open PCT		305	Dry Sclerophyl	Upper Riverina	Apple Box - Br	1	0	0	1	0
Open PCT		306	Dry Sclerophyl	Upper Riverina	Red Box - Red	1	0	0	1	0
Open PCT		310	Dry Sclerophyl	Upper Riverina	Nortons Box -	1	0	0	1	0

Figure 44 Sorting results by Vegetation Class

- 2. Click on the column header again to reverse the sort order. The column currently used to sort the results will be shown as dark grey.
- 3. Adjust the width of the columns by moving the cursor over the split between any two columns when the cursor changes to the column width adjust icon, click and hold to drag the width of that column to the desired width. However, the column width will revert to default each time a new set of results is displayed.

3.3.2 Filtering results

403 records found

It is possible to filter the results so that, for example, only those PCTs that match multiple search criteria are shown in the results table. To apply a filter to further refine the results:

- 1. Type the desired number to filter by into the box under the column name.
- 2. Click the 'Filter' icon in that column and select the desired operation from the list (see Figure 45).

mation 🔺 🔯						8	-	
					1	Export to C	SV Export to V	Vord
	Select to View	PCT_ID	Formation	Class	Vegetation_Type	No_of_matches	IBRA	
		T				1 7	T	
Formation: A	Arid Shrublands (Acaci	a sub-formation)						
Open PCT		69	Arid Shrublands (Aca	Sand Plain Mulga Sh	White Cypress Pine -	1	1	
Open PCT		77	Arid Shrublands (Aca	North-west Plain Shr	Yarran shrubland of t	1	1	
Open PCT		118	Arid Shrublands (Aca	Gibber Transition Shi	Gidgee chenopod wa	1	1	
			2000 Con 1000 Con		C	2		

Figure 45 Filtering results by No_of_matches

3. The results will reflect your changes. In the example in Figure 46, the selection for 'LessThanOrEqualTo' 1 was filtered out from the 'No_of_matches' column. You can also apply filters simultaneously on different columns.

403 records found

nation 🔺 🖾							
						Expo	rt to CSV 🕎 Export to Wor
	Select to View	PCT_ID	Formation	Class	Vegetation_Type	No_of_mate	hes IBRA
Formation: A	rid Shrublands (Acaci	T a sub-formation)				1	NoFilter
Open PCT		69	Arid Shrublands (Aca	Sand Plain Mulga Sh	White Cypress Pine	1	NotEqualTo
Open PCT		77	Arid Shrublands (Aca	North-west Plain Shr	Yarran shrubland of	1	GreaterThan
Open PCT		118	Arid Shrublands (Aca	Gibber Transition Shi	Gidgee chenopod w	1	LessThan
Open PCT		119	Arid Shrublands (Aca	Sand Plain Mulga Sh	Sandplain Mulga tal	1	Greater I nanOrEqual To

Figure 46 The selection for 'GreaterThanOrEqualTo 2' was filtered out from the 'No_of_matches' column

PCT Identification – viewing summaries 3.4

Once results are displayed in the results area, you can view summary information for the listed PCTs ('Types'), and for their relevant Vegetation Classes and Formations:

- 1. To view summaries for all the PCTs listed, leave the 'Select to View' selection boxes unchecked.
- 2. To select individual PCTs from the list, check the selection boxes next to the relevant PCTs listed, as shown below (you can check as many as you like, but the retrieval of the summaries may slow down if a large number are selected).
- 3. Once you have selected the PCTs you want to view, click the 'View Summaries' button. The page opens with the PCTs to be viewed nested within their relevant Formation name (Figure 47).
- 4. To view the Classes and PCT names, click on the relevant '+' signs to open those subgroups.

			S	how Results	?		Vie	ew Summaries	•			
105	7 records found.											
Fo	ormation 🔺 🖾											
									Exp	oort to CSV	Export to Wo	rd
		Select to View	PCT_ID	Formation	Class	Vegetation_Ty	No_of_matche	IBRA	Species Grd	Structure	Keith_class 🔺	Γ
			T				0 7	T	T	T	T	
_	Open PCT		60	Arid Shrubland	Stony Desert N	Black Oak - We	1	0	0	1	0	~
I	Open PCT		68	Arid Shrubland	Stony Desert N	White Cypress	1	0	0	1	0	
	Open PCT		69	Arid Shrubland	Sand Plain Mul	White Cypress	1	0	0	1	0	
	Open PCT		144	Arid Shrubland	North-west Pla	Leopardwood	1	0	0	1	0	
	Open PCT		264	Arid Shrubland	North-west Pla	Supplejack wo	1	0	0	1	0	ľ

Figure 47 Viewing summaries

5. Click on one of the names (PCT, Class or Formation) in the 'Search results' area on the left, and the summary information (including an image and map if one is available) will be displayed in the 'Overview' area on the right (Figure 48).



Figure 48 Viewing the Formation ('F'), Class ('C') and summary overview for the PCT ('T')

- 6. To view another summary overview, click on another name.
- 7. Click 'Close' at the top, or the 'OK' button at the bottom of the page to exit the Summary View screen.

3.5 PCT Identification tool – exporting lists

You can export the list of matched PCTs at any time (provided types are listed in the results area, after 'Show Results' has been clicked). The options are to export as a .csv file (suitable for opening in a spreadsheet program such as MS Excel) or as a .doc file (see Figure 49).

ormation 🔺 🗵										
								Exp	oort to CSV	Export to V
	Select to View	PCT_ID	Formation	Class	Vegetation_Ty	No_of_matche	IBRA	Species Grd	Structure	Keith_class
		T				0 7	T	T	T	T
Open PCT		60	Arid Shrubland	Stony Desert N	Black Oak - We	1	0	0	1	0
Open PCT	\checkmark	68	Arid Shrubland	Stony Desert N	White Cypress	1	0	0	1	0
Open PCT		69	Arid Shrubland	Sand Plain Mul	White Cypress	1	0	0	1	0
Open PCT		144	Arid Shrubland	North-west Pla	Leopardwood	1	0	0	1	0
Open PCT		264	Arid Shrubland	North-west Pla	Supplejack wo	1	0	0	1	0

Figure 49 Exporting the list of matched PCTs to csv or Word

To export the file:

1. Click the 'Export to CSV' icon or 'Export to Word'. A Save dialogue box will open (see Figure 50).

site survey Online services	NSW Government	Accessibility
n webtest.environment.nsw.gov.au?	0	pen Save 🔻 Cancel 🗙
T	webtest.environment.nsw.gov.au?	n webtest.environment.nsw.gov.au?

Figure 50 The Save dialogue box

- 2. Choose the option you require by clicking on the relevant button. If you click 'Save', the directory window will open to allow you to choose where to save the file, and to rename the file as desired.
- 3. Click 'Save' to save the file according to the selections you have made.
- 4. If you click 'Open' in the previous step, the file will automatically open in the default application you have set for opening .csv or .doc files (e.g. Excel or Word, respectively).

4 Reports and exports

The report function is used to produce a report summarising the characteristics of PCTs as a .pdf or .doc. The export function allows you to export the data into tables in a .csv document, to use the data for subsequent analysis. However, the search functions are the same whether you want to export data or produce a report.

Most reports and exports are for PCTs. However, there is also the option to report/export data for NSW Landscapes, which provides data about the landscapes and their % cleared estimates.

To export data or produce reports of data for PCTs and NSW Landscapes, choose 'Reports/Exports' from the dropdown menu under the PCT Data top navigation bar (see Figure 51).



Figure 51 Reports/Exports options for PCT and NSW Landscapes data

Please read the information under 'Choose Your Search', and in the following sections to understand the nature and limitations of search options for both exporting and reporting data.

4.1 State-wide advanced searches

Only some fields in the BioNet Vegetation Classification application have been fully populated for all PCTs, including:

- PCT ID
- authority
- classification confidence level
- common name
- scientific name
- vegetation class (Keith 2004)
- vegetation formation (Keith 2004)
- IBRA Region
- IBRA Subregion
- upper stratum species
- middle stratum species
- ground stratum species
- PCT definition status
- PCT % cleared estimate

- community benchmark data
- references.

Building fairly simple searches (e.g. 2–3 criteria) based on fully populated fields will return comprehensive results. Click on the hyperlinked text to the 'Report and Export Search Options' on the search page for further information.

If you wish to customise your search, options are to select 'Custonised terms' in Step2 and/or to use the 'Advanced options' features.

4.1.1 Step 1: select report template

When the desired template is selected in Step 1, the relevant search fields for that template are loaded into the 'Select communities by' query box in Step 2 (Figure 52 shows the Community profile report). Also note that the appropriate list of fields to be exported will be populated into the 'Advanced options' area at the bottom of the page.

By default, the selection in the 'Select communities by' query box will show the 'common terms' option, with all fields unchecked.

Reports: State-wide Advanced Search
Guide to producing report Definition of fields
Create a new search Load a saved search Step 1. Choose report template Community profile report What's in the report Select a saved search
Step 2. Select communities of: C customised terms Guide to building search quoties
PCT Benchmarks PCT Benchmark Status Community Definition PCT Common Name PCT Common Vaage Name
To change how images are displayed, or to select fields to be shown in the report, please open the 'Advanced options' section below. Otherwise, please proceed to Step 4 Show results to preview the communities that match your search.
Step 3. Show results Show Name your search Step 4. Run report Acrobat PDF Run
Advanced options
Include images ?

Figure 52 Community profile report option showing potential query or search terms

4.1.2 Step 2: select communities using common terms

There are two ways to build your search query (i.e. criteria that the system will use to retrieve the relevant PCTs) – via common terms or customised terms (see Section 4.3 for instructions about making customised terms). Appendix 3 shows you how to export a list of Plant Community Types in a particular IBRA Bioregion.

By default, the 'common terms' method is active. This method presents a subset of the total number of fields and tables in the database, representing the most commonly used search terms:

- 1. Scroll down the list to see what fields are available.
- 2. Check one of the search field boxes. The 'Add' button should now become active (i.e. no longer greyed out).
- 3. Click the 'Add' button to open the 'Search condition' window for the selected criterion (see Figure 53).

The picture can't be displayed.	

Figure 53 Specifying the 'Search conditions' for a selected criterion

- 4. Click on the 'Operator' dropdown menu to view and select the options. These will vary according to the type of data in the relevant field.
- 5. When you have selected the 'Operator', select the 'Attribute value' from the dropdown menu next to the field, as shown in Figure 53
- 6. Select the term you want by clicking once on the relevant entry. The 'Search condition' window should now show your choices.
- 7. Select the type of operator you want applied for this criterion, either 'Any (Or)' or 'All (And)'. If you are using only one criterion, this term is not relevant. The 'Select records for' terms operate between the criteria, so that selecting 'Any (or)' will include communities that meet either of the criteria, while 'All (And)' will include only communities that meet both criteria simultaneously.

The order of criteria is crucial to getting the result you want, as the first criteria creates a subset that the second criteria is matched to. Using the same criteria and swapping their order can therefore produce different results.

8. Click 'OK' to retain the criteria. The selected criteria should now appear in the Search query build box to the right (Figure 54).

Reports: State-wide A	Advanced Search								
							Guide to) producir Definitio	ig reports n of fields
Create a new search			Load a s	aved search	I				
Step 1. Choose report template	Community profile report What's ir	the reports?	Load a sav	ved search saved search	choose		~]	
Step 2. Select communities by: common Guide to building search queries	non terms OR O customised terms								
		^		Table	Column	Operator	Value		~
Distributional Information IBRA Bioregion		A	ы	Distributional Information	IBRA Bioregion	=	SYB : Sydney Basin	Edit criteria	Del criti
IBRA Sub Region			Any (Or)	Distributional Information	IBRA Bioregion	=	AUA : Australian Alps	Edit criteria	Del criti
- Citation			<						>
To change how images are displayed, o the 'Advanced options' section below. Otherwise, please proceed to Step 4 Sh search.	r to select fields to be shown in the report, plea ow results to preview the communities that ma	ase open atch your	You can s and click saved sea	save your searc Save. The save arch' area above	h and displa d search wil e.	y options by I then be ava	naming the ailable to sel	current se ect in the	attings 'Load a
Step 3. Show results	Show		Name you	r search			_		
Step 4. Run report	Acrobat PDF 🔽 Run		Save sea	arch			Save		

Figure 54 Adding criteria to the Search condition page

9. Delete or edit the criteria in this compiling area by clicking on the 'Edit criteria' or 'Delete criteria' text separately for each criterion (Figure 55). The 'Edit criteria' option will take you back to the 'Search condition' window with the current criteria shown. The 'Delete criteria' will remove that criterion entirely from the compiled list.

						Guid	Defin	ition of
ate a new coareb			Load a saved sea	rch				
eate a new search			Load a saved search					
1. Choose report template	Community profile report	What's in the reports?	Select a saved sea	rchchoos	ie		~	
2 Select communities by:	on terms OR Ocustomised terms							
le to building search queries	on terms on O customised terms		-					
- UVegetation Class			Table	Column	Operator	Value		
Vegetation Formation		^	Distributional	IBRA	-	A11A -	Edit	Delet
Distributional Information			Information	Bioregion	-	Australian	criteria	criteri
		Ad	d			Alps		
- IBRA Bioregion								
BRA Bioregion IBRA Sub-region								
IBRA Bioregion IBRA Sub-region OCL								

Figure 55 Deleting or editing criteria from the 'Search query build box'

Appendix 3 shows examples for frequently used report/export queries.

Advanced options

The 'Advanced options' area at the bottom of the screen provides additional functionality to both choose:

• to produce or not produce images in the report

• which fields will be displayed in the report/export.

Images options

For the reports option, choose the 'yes' option under 'Include images?' if you want images included. This option only applies to reports that have images in their template (e.g. long reports do, a simple list of communities does not). If the template you choose does not have images, then this field does nothing.

This option does not apply to exports.

Fields to display

There are a few default fields that will be included in the report/export option even if all fields are 'off'.

However, you can customise which additional fields are displayed. The 'Choose fields for report' area provides a list of the fields currently set to be produced in the chosen report or export template (see Figure 56). By default, all the fields are checked as 'on' as all fields in the template will be produced. You can simplify your report/export by turning off any number of fields. The fields are arranged according to the tables within the database. You can turn individual fields off (and back on) or turn off (and back on) all fields in each table.

As you alter the display fields, the 'Fields that will be displayed' box on the right will refresh to reflect the changes.



Figure 56 Customising report/export display fields

4.1.3 Step 3: show results

When you are happy with your selection criteria:

1. Click the 'Show' button. This opens a list of the PCTs that meet your criteria (Figure 57). This step is essential for compiling the search query and cannot be skipped.

V	PCT ID	Common Name	Scientific Name	▲ E
7	19	Cypress Pine woodland of source-bordering dunes mainly on the Murray and Murrumbidgee River floodplains	Callitris glaucophylla , Callitris gracilis subsp. murrayensis / Calytrix tetragona / Austrodanthonia caespitosa , Austrostipa scabra subsp. scabra , Einadia nutans subsp. nutans , Actinobole uliginosum	
V	20	Buloke - Moonah - Black Box open woodland on sandy rises of semi arid (warm) climate zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion)	Eucalyptus largiflorens / Allocasuarina luehmannii , Melaleuca lanceolata , Hakea tephrosperma / Austrodanthonia caespitosa , Austrostipa nodosa , Atriplex leptocarpa	
V	26	Weeping Myall open woodland of the Riverina Bioregion and NSW South Western Slopes Bioregion	Acacia pendula , Casuarina cristata / Rhagodia spinescens , Maireana decalvans / Austrodanthonia caespitosa , Atriplex semibaccata , Einadia nutans subsp. nutans , Rhodanthe corymbiflora	
V	27	Weeping Myall open woodland of the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion	Acacia pendula / Rhagodia spinescens , Sclerolaena muricata / Monachather paradoxus , Chloris truncata , Dichanthium sericeum subsp. sericeum , Leiocarpa tomentosa	
V	35	Brigalow - Belah open forest / woodland on alluvial often gilgaied clay from Pilliga Scrub to Goondiwindi, Brigalow Belt South Bioregion	Acacia harpophylla, Casuarina cristata / Geijera parviflora, Eremophila mitchellii, Rhagodia spinescens, Apophyllum anomalum / Einadia nutans subsp. eremaea, Oxalis chnoodes, Austrostipa ramosissima, Enteropogon acicularis	
V	42	River Red Gum / River Oak riparian woodland wetland in the Hunter Valley	Eucalyptus camaldulensis / Austrostipa verticillata / Austrodanthonia spp., Cynodon dactylon , Einadia trigonos , Enchylaena tomentosa	
V	48	White Cypress Pine - Drooping Sheoak grassy open woodland of the Riverine Plain	Callitris glaucophylla , Allocasuarina verticillata / Thyridolepis mitchelliana , Themeda australis , Stackhousia monogyna , Austrostipa eremophila /	
1	54	Buloke - White Cypress Pine woodland in the NSW	Allocasuarina luehmannii , Callitris glaucophylla , Eucalyptus	

Figure 57 Showing the PCT data results

- By default, all the matching PCTs are shown checked that is, they will be in the report/export. You may need to scroll down the page to see the full list of communities. To modify, either uncheck individual PCTs in the list, or uncheck the top check box next to the PCT ID column header to deselect all PCTs. You can then reselect any by clicking individual communities or recheck all.
- 3. When you are happy with the PCTs selected, click 'OK' to save these as the ones to be run in the report. Click 'Close' if you **don't** want to save your changes. However, this will revert back to the default position (i.e. all PCTs will appear in the report).

4.1.4 Step 4: run report/export

When you are ready:

- 1. Choose to produce the report as an Acrobat PDF or as a Word file.
- Click 'Run' to produce the report/export. Depending on the size of the report/export (i.e. number of PCTs selected and number of fields/columns to be displayed), this may take a few minutes.
- 3. For PDF reports, when the system and server have processed the request, the PDF will be displayed on screen in a separate window. You can view, save and print the PDF report in this screen. For Word, you will have the choice of Open/Save/Cancel the report (Figure 58) after the server has processed the request.

The preview of pdf reports appears as a new pop-up screen. For this to function, please ensure that 'block pop ups' is not turned on. Refer to Appendix 2 for instructions on how to turn off the pop-up block.



Figure 58 Opening or saving Word reports when running the report/export

- 4. If you are exporting, then when you click 'Run', a pop-up will appear.
- 5. Click 'Download CSV File' to save the export file. Clicking 'Close' will cancel the operation.
- 6. A second pop-up will appear. Click 'View downloads'.
- 7. A third pop-up will appear. Click 'Open' or 'Save' the file as relevant. 'Close' will cancel the operation, but the 'Download CSV' dialogue box will remain.
- 8. Open to access the information in an Excel spreadsheet.

4.2 Saving report/export criteria

Once you have created your report/export query, you can save the search set up to retrieve and run later, thus removing the need to create the search query again. To do this:

- 1. Give the current search set up a name in the 'Name your search' box on the right.
- 2. Click 'Save'. This will save the set up to your log in (i.e. only you have access to this saved search).

To retrieve the saved search:

- 1. Select it from the 'Load a saved search' box in the top right, by selecting it from the list.
- 2. Click once on the relevant saved search. This will automatically populate the fields for the search as they were saved to that Search name.

To modify an existing saved search:

- 1. Retrieve and load it.
- 2. Make your changes.
- 3. Save it using the same name. This will overwrite the existing saved set up.

You can create multiple saved searches, but remember to change the saved name if you do not want to overwrite an existing saved search (see Figure 59).

Reports: State-wide Advanced Search	
	Guide to producing reports Definition of fields
Create a new search Step 1. Choose report template Community profile report V What's in the reports	Load a saved search Load a saved search Select a saved searchchoose
Step 2. Select communities by: O common terms OR O customised terms	
Guide to building search queres Image: P- Community Benchmarks	Table Column Operator Value
Community Definition PCT Benchmark Status Community Definition PCT Common Name PCT Common Vage Name	Add Community PCT Contains red Edit Delete Definition Common gum criteria criteria
To change how images are displayed, or to select fields to be shown in the report, please open the 'Advanced options' section below. Otherwise, please proceed to Step 4 Show results to preview the communities that match your search.	You can save your search and display options by naming the current settings and click Save. The saved search will then be available to select in the 'Load a saved search' area above.
Step 3. Show results Show Step 4. Run report Acrobat PDF	Name your search Save search Save

Figure 59 Loading and saving searches

4.3 Select communities using customised terms

The alternative approach to selecting communities for your reports or export is to customise the terms or criteria that are used in building your search query (Figure 60):

- Click the button next to the 'customised terms' option at Step 2. The list of fields will refresh to display the full list of fields available to create your query. There are nearly 200 fields in total, so setting up your query may be time consuming. However you will be able to save and retrieve your query as part of a saved search once you have created it (see Section 4.2).
- 2. The fields initially are collapsed within the tables that the fields belong to. Click on the '+' symbol next to the category (table or field grouping) to expand it and see the fields contained therein.
- 3. Refer to Section 4.1.2 for instructions for selecting the terms to build your query.
- 4. Collapse a category at any time by clicking on the '-' symbol against an open category menu.

The picture can't be displayed.



Definitions of the table categories (i.e. 'terms') and fields are provided via the hyperlinked 'Definitions of fields' document.

Part C Using the additional functions in the Vegetation Classification edit application

Part C will be completed later in 2017. Please refer to the old VIS Classification edit application manual at <u>the BioNet website</u>.

Part D Appendixes and additional information

Appendix 1 Background to the BioNet Vegetation Classification database

BioNet Vegetation Classification is the database for plant community types (PCTs) in New South Wales (NSW). The development of the classification database is an integral part of the NSW Vegetation Information System (NSW VIS), which aims to provide a single, integrated source for vegetation information in NSW.

The aim of the NSW BioNet Vegetation Classification database is to produce a consistent hierarchical vegetation classification of New South Wales PCTs, and to provide public access to information on these PCTs. This version of the Vegetation Classification database is a further development of the VIS Classification database. This further builds on the original NSW VCA (Vegetation Classification and Assessment) database developed by the Royal Botanic Gardens Trust (RBGT), and published in the scientific journal *Cunninghamia* (Benson 2006; Benson, *et al.* 2006; Benson 2008; and Benson *et al.* 2010).

The NSW PCT classification was constructed by integrating two existing vegetation classification databases in 2011: the NSW Vegetation Classification and Assessment database developed by the RBGT; and the Over-cleared BioMetric Vegetation Types Database used in Property Vegetation Planning and BioBanking assessment processes. By integrating this information into one system VIS Classification established a single NSW Master PCT list as the focal point for both vegetation type mapping and regulatory assessment processes.

Further background information on the development of the NSW Vegetation Information System and its components can be found on the <u>BioNet website</u>.

A1.1 OEH Biodiversity Information System Team's role

The development of the NSW VIS is being coordinated by the Biodiversity Information Systems Team within the Science Division of the NSW Office of Environment and Heritage (OEH). This team is developing and supporting the NSW VIS, BioNet-Atlas, Threatened Species Profiles Database and other native vegetation and biodiversity projects and programs as part of OEH's strategic leadership of native biodiversity information management. One of the key objectives for the team, and the NSW VIS databases in particular, is to ensure effective access to and appropriate use of, the full range of vegetation information for NSW, including plot, classification and mapping data and products.

For further information on the role of the team, the NSW VIS or OEH's role in vegetation and biodiversity information, please email the OEH Biodiversity Information Systems Team at <u>bionet@environment.nsw.gov.au</u>.

Appendix 2 Possible Internet Explorer issues

Users may experience some issues when using Internet Explorer:

- If the pop-up blocker is turned off, you may have problems with some functions including producing reports.
- A known issue with Internet Explorer is the retrieval of cached information overriding the loading of updated pages.

A2.1 Pop-up blocker

To enable some functions, including producing reports, you may need to have the Pop-up Blocker turned off. In Internet Explorer, you can do this via the Tools menu, under 'Internet options' (see Figure 61).



Figure 61 The 'Tools' menu on Internet Explorer

On the general tab, go to 'Tabs' (Figure 62).

nternet Op	tions ?X	
General C	onnections Programs Advanced	
Home pag	e	
-	To create home page tabs, type each address on its own line.	
90	http://insite.environment.nsw.gov.au/Pages/home.aspx	
	_	
	Use current Use default Use new tab	
Startup -		
C Star	t with tabs from the last session	
Star	t with home page	
Tabs		
Change	how webpages are displayed in tabs. Tabs	
Browsing	history	
Delete	emporary files, history, cookies, saved passwords, and web	
form inf	ormation.	
Dele	te browsing history on exit	
	Delete Settings	
Appearan	ce	
Col	ors Languages Fonts Accessibility	
	OK Cancel Apply	

Figure 62 The 'Tabs' button under the 'Internet Options' menu

Once the 'Tabs' button is selected, ensure 'Let Internet Explorer decide how pop-ups should open' (see Figure 63).

Warn me when dosing multiple tabs Always switch to new tabs when they are created	
Always switch to new tabs when they are created	
Show previews for individual tabs in the taskbar*	
✓ Enable Tab Groups*	
🔽 Open each new tab next to the current tab	
$\hfill\square$ Open only the first home page when Internet Explorer starts	s
Vhen a new tab is opened, open:	
The new tab page	
The new tab page	
The new tab page Vhen a pop-up is encountered:	
The new tab page When a pop-up is encountered: • Let Internet Explorer decide how pop-ups should open	
The new tab page The new tab page When a pop-up is encountered: • Let Internet Explorer decide how pop-ups should open Always open pop-ups in a new window	
The new tab page The new tab page When a pop-up is encountered: C Let Internet Explorer decide how pop-ups should open Always open pop-ups in a new window Always open pop-ups in a new tab	
The new tab page The new tab page When a pop-up is encountered: • Let Internet Explorer decide how pop-ups should open Always open pop-ups in a new window Always open pop-ups in a new tab Depen links from other programs in:	
The new tab page The new tab page Image: Comparison of the page When a pop-up is encountered: Image: Comparison of the page Image: Comparison of the page: Comparison	
The new tab page The new tab page When a pop-up is encountered:	
The new tab page The new tab page When a pop-up is encountered: C Let Internet Explorer decide how pop-ups should open Always open pop-ups in a new window Always open pop-ups in a new tab Deen links from other programs in: A new window A new tab in the current window The gurrent tab or window	

Figure 63 The pop-up options on the 'Tabbed Browser Settings' menu

A2.2 Issues with refreshing pages

There is a known issue with Internet Explorer in that the retrieval of cached information may override the loading of updated pages. If during use you find that pages or areas are not refreshing as expected (e.g. clicking on 'options' buttons does not clear previous selections), this may be due to cache retrieval.

To fix this, select the 'Internet Options' from the Tools menu in Internet Explorer, as shown in the previous section. Then select 'Browsing history settings' (Figure 64).

nternet Options	1	? >
General Connections Programs Adva	anced	
Home page To create home page tabs, t	type each address on its own line. sw.gov.au/Pages/home.aspx 🔺 👻	-
Use current	Use default Use new tab	ľ
 Start with tabs from the last sessi Start with home page Tabs Change how webpages are displayed 	ion I in tabs. Tabs	
Browsing history Delete temporary files, history, cookie form information.	es, saved passwords, and web	
	Delete Settings	
Appearance Colors Languages	Fonts Accessibility	
ОК	Cancel Apply	

Figure 64 The Browing history options under the 'Internet Options' menu

On the 'Settings' page, ensure that 'Automatically' is ticked (see Figure 65).

L*	
1	Website Data Settings
	Temporary Internet Files History Caches and databases
	Internet Explorer stores copies of webpages, images, and media for faster viewing later.
	Check for newer versions of stored pages:
	C Every time I visit the webpage
5	C Eventime Letert Internet Evplorer
	Automatically
	O Never
	Disk space to use (8-1024MB) 250 + (Recommended: 50-250MB)
r	Current location:
t	C:\Users\dehaanc\AppData\Local\Microsoft\Windows\INetCache\
	Move folder View objects View files
1	OK Cancel

Figure 65 Select 'Automatically' under the 'Temporary Internet Files' tab

Click 'OK', which will take you back to the previous screen. Here, click on 'Delete' in the Browsing history section (see Figure 66).

iternet Options		?
General Connections Programs Ac	lvanced	
Home page To create home page tabs	, type each address .nsw.gov.au/Pages	on its own line. /home.aspx
Use current	Use default	Use new tab
 Start with tabs from the last se Start with home page Tabs Change how webpages are display 	ssion ed in tabs.	Tabs
Browsing history Delete temporary files, history, coo		rds, and web
form information.		
	Delete	Settings
Appearance Colors Languages	Fonts	Accessibility
0	K Cancel	Apply

Figure 66 The 'Delete' button on the 'Browsing history' menu

Tick 'Temporary Internet files and website files' and 'Cookies and website data', then click 'Delete'. This may take a while, depending on how often you delete these files and data (see Figure 67).

Afterwards, click 'OK' until you are out of the Internet options box.



Figure 67 The 'Delete Browsing History' menu in Internet Explorer

Appendix 3 Example searches for reports and exports

A3.1 Exporting a list of Plant Community Types in a particular IBRA Bioregion

1. Select **Exports** (see Figure 68).

Choose Your Search

Choose the search option below that best suits your needs. Further information on the types o Advanced Search option enables you to further design your reports and exports via a larger se produced in your report or export.



Search

Please refer to the Report and Export Search Options document for further information.

Figure 68 Choose exports under 'Choose your search'

- 2. Step 1: Choose the 'Community profile report' export template.
- 3. Step 2: Select common terms and check 'IBRA Bioregion' (see Figure 69).

Create a new search Step 1. Choose export template	Load a saved search Load a saved search Select a saved searchchoose
Step 2. Select communities by: Ocustomised terms	
Guide to building search queries	
Plant Community Type ID (PCT ID)	^
- Uvegetation Class	
L. Vegetation Formation	Add
- Distributional Information	
- IBRA Bioregion	
HBRA Sub region	

Figure 69 Selecting the desired IBRA Bioregion

- 4. Select 'Add'. A window will pop up asking you to select the search condition. Select search conditions as:
- Operator: =
- Enter value: 'SYB: Sydney Basin' (Figure 70)
- Select records for: 'Any (Or)'
- 5. Select 'OK' to close display window. The screen will then show the criteria selected.

Г		000
L		use
		- 1
	Search condition	
L	Column IBRA Bioregion	- 1
	Attribute value SYB : Sydney Basin	
10	Select records for (Any (Or) All (And)	
		K
L		

Figure 70 Selecting SYB:Sydney Basin as the IBRA Bioregion

6. Follow Sections 4.1.3 and 4.1.4 to show the results and run a report.

As you compile criteria, please check the 'Show' button in Step 3 of the interface. This allows you to see if the current combination of criteria returns at least one expected PCT. If the 'Show' button is greyed out, there are no PCTs that meet the current combination of criteria.

A4.2 Exporting a benchmark report for an IBRA Bioregion

To export a report containing benchmark data for PCTs in certain IBRA Bioregions (see Figure 71):

- 1. Select 'PCT Benchmarks Report' in Step 1.
- 2. Select 'Benchmark IBRA Region' under 'Community Benchmarks' and 'Add' to your search criteria.
- 3. Repeat this step to add multiple IBRA Regions to your Benchmark Report.

Exports: State-wide Advanced Search	
	Guide to producing exports Definition of fields
Create a new search Step 1. Choose export template PCT Benchmarks report What's in the exports?	Load a saved search Load a saved search Select a saved searchchoose
Step 2. Select communities by: Common terms OR Customised terms Guide to building search queries Community Benchmarks Comments Community Benchmark IBRA Region CBenchmark ReferenceSite CBenchmark Source CBenchmark Variation CAR	Table Column Operator Value Community Benchmarks Benchmark IBRA Region = AUA : Edit AUA : Edit AUA : Criteria Delete criteria
To change how images are displayed, or to select fields to be shown in the export, please open the 'Advanced options' section below. Otherwise, please proceed to Step 3 Show results to preview the communities that match your search.	You can save your search and display options by naming the current settings and click Save. The saved search will then be available to select in the 'Load a saved search' area above.
Step 3. Show results Show Step 4. Run export Run	Save search Save

Figure 71 Exporting benchmark data for PCTs in certain IBRA Regions

Acronyms and abbreviations

Acronym or abbreviation	Definition
IBRA	Interim Biogeographic Regionalisation of Australia
LGA	local government authority
NSW	New South Wales
OEH	NSW Office of Environment and Heritage
PCT	plant community type
TEC	threatened ecological community
VCA	Vegetation Classification and Assessment
VIS	Vegetation Information System

References

Benson, J.S. (2006) New South Wales Vegetation Classification and Assessment: Introduction - the classification, database, assessment of protected areas and threat status of plant communities. Cunninghamia 9(3): 331-382.

Benson, J.S., Allen, C., Togher, C. & Lemmon, J. (2006) New South Wales Vegetation Classification and Assessment: Part 1 Plant communities of the NSW Western Plains. Cunninghamia 9(3): 383-451.

Benson, J.S. (2008) New South Wales Vegetation Classification and Assessment: Part 2 Plant communities in the NSW South-western Slopes Bioregion and update of NSW Western Plains plant communities, Version 2 of the NSWVCA database. Cunninghamia 10(4): 599-673.

Benson, J.S., Richards, P., Waller, S. & Allen, C. (2010) New South Wales Vegetation classification and Assessment: Part 3 Plant communities of the NSW Brigalow Belt South, Nandewar and west New England Bioregions and update of NSW Western Plains and South-western Slopes plant communities, Version 3 of the NSW VCA database. Cunninghamia 11(4).

Forestry Commission of New South Wales (1989) Forest types in New South Wales. Research Note 17 (Forestry Commission of New South Wales: Pennant Hills).

IUCN (The World Conservation Union) (2001) IUCN Red List Categories: Version 3.1 Prepared by the IUCN Species Survival Commission (IUCN: Gland, Switzerland and Cambridge).

Keith, D.A. (2004) From ocean shores to desert dunes: the vegetation of New South Wales and the ACT (Department of Environment and Conservation NSW: Hurstville).

Mitchell, P.B. (2002) NSW Ecosystems study: background and methodology. Report 13.7 NSW Biodiversity Strategy (NSW Department of Environment and Conservation: Sydney).

New South Wales Department of Environment and Conservation (2004) IBRA sub-regions. Unpublished GIS map (NSW DEC: Sydney).

Walker, J. & Hopkins, M.S. (1990) Vegetation. In McDonald, R.C., Isbell, R.F., Speight, J.G., Walker, J. & Hopkins, M.S. (1990) Australian soil and land survey: field handbook (Inkata Press: Melbourne).